

Weekly report

In the first two days of this week, I mainly focused to the group report of the paper < A gradient-based Comparison Measure for Visual analysis of multifield Data>. The main job of this paper is the introduction of a gradient-based comparison measure applicable on an arbitrary number of scalar fields as well as the high performance computing method. Xie Cong had a general discuss with me and he presented an idea which maybe suitable for a deeply discussion in the coming brainstorm of our group.

After the group meeting, I kept merging all the codes of the compression project to the frame. As I thought originally, the codebook texture and index texture should be the output of the vector quantization process as well as the input of the next step. However, I found there exists an issue. The data which is for the transfer function texture's generation should be the original raw data, and I obviously ignore this point in the previous plan. I only took the codebook and index texture as the input and the frame was designed to fit for this purpose. So, I think I should change the frame to make it suitable for the this situation. By the way, the compression rate now is nearly 4:1.

It should be completed in last week, but when I try to complete this redesign, I got the cad&cg editors' email refers to the paper's modifications. Then I used all the rest days of the week to revise the paper and it is really a tedious and cumbersome work. Fortunately, I came to the end of this work last deep night and is just waiting for the editor to come back from her holiday.

A lot experiments should be done and I will do the merge job as fast as I can. There must be a result in next week's report.